



# 35 Vinyl Electrical Color Coding Tape

## Data Sheet



LISTED  
510  
Insulating Tape



LR 48769

### 1.0 Product Description

Scotch™ 35 Vinyl Electrical Color Coding Tape is an electrical grade polyvinyl chloride tape with a pressure sensitive rubber adhesive available in nine fade resistant colors. Scotch 35 Tape is designed for use in phase identification, color coding of motor leads and piping systems, and for marking safety areas. This abrasion and weather resistant tape has excellent electrical insulating properties, wraps smoothly, conforms well and holds over a wide range of temperatures. 35 tape is resistant to moisture, alkalis, acids and corrosion. It is an Underwriters' Laboratories Listed and Canadian Standards Association Certified "Insulating Tape."

- UL Listed; UL 510 Standard "Insulating Tape" (product category OANZ), File E129200.
- CSA Certified; Standard. C22.2 No. 197-M1983 "PVC Insulating Tape," File LR 48769.
- Polyvinyl chloride (PVC) backing.
- Pressure-sensitive rubber based adhesive.
- Color Coded for job identification and safety.
- Inhibits corrosion of electrical conductors.
- For indoor and weather protected outdoor uses.

### 2.0 Typical Data / Physical Properties

|   |  |
|---|--|
| <b>Temperature Rating</b><br><b>UL 510</b>              | 80°C (176°F)   |
| <b>CSA</b><br>C22.2 No. 197-M1983                       |  |
| Handling  | 0°C (32°F)   |
| Continuous Operation                                    | 105°C (220°F)  |
| <b>Colors</b>   | Red, Yellow, Blue, Brown, Gray, White, Green, Orange, Violet |
| <b>Thickness</b><br>ASTM D1000                          | 7 mils<br>(0.178mm)  |
| <b>Break Strength</b><br>ASTM D1000<br>22°C (72°F)      | 17 lbs./in.  |
| <b>Ultimate Elongation</b><br>ASTM D1000<br>22°C (72°F) | 225%   |
| <b>Adhesion to Steel</b><br>ASTM D1000<br>22°C (72°F)   | 20 oz./in.   |
| <b>Adhesion to Backing</b><br>ASTM D1000<br>22°C (72°F) | 20 oz./in.   |
| <b>Flammability</b><br>UL 510<br>ASTM D1000             | 1 sec.<br>4 sec.   |
| <b>Accelerated Aging</b><br>ASTM D1000                  | 90%  |
| <b>Flagging</b><br>ASTM D100                            | <0.1 inch  |
| <b>Telescoping</b><br>24 Hours @ 50°C<br>(120°F)        | <0.1 inch  |

## 3.0 Electrical Properties

|                                |                       |
|--------------------------------|-----------------------|
| <b>Voltage Rating</b>          |                       |
| UL 510                         | 600 Volts             |
| <hr/>                          |                       |
| <b>Dielectric Strength</b>     |                       |
| ASTM D1000                     |                       |
| Standard Condition             | 1250 v/mil            |
| High Humidity Condition        | 90% of Std. Condition |
| <hr/>                          |                       |
| <b>Insulation Resistance</b>   |                       |
| ASTM D1000                     | >1 x 10 <sup>6</sup>  |
| (High Humidity megohms Method) |                       |

*Note: These are typical values and should not be used for specification purposes.*

## 4.0 Specifications Product

The tape is based on polyvinyl chloride (PVC) and/or its copolymers and has a rubber-based, pressure-sensitive adhesive. The tape shall be 7 mils thick, and be UL Listed and marked per UL Standard 510 as "Flame Retardant and Weather Resistant." The tape shall be compatible with synthetic cable insulations, jackets and splicing compounds. The tape will remain stable and will not telescope more than 0.1 inches when maintained at temperatures below 120°F (50°C).

## 5.0 Installation Techniques

The tape shall be applied in half-lapped layers with sufficient tension to conform and produce a uniform covering. In most applications, this tension will reduce the width of the tape to approximately 5/8 of its original width. On pigtail splice, the tape should be wrapped beyond the end of the wire and then folded back, leaving a protective cushion to resist cut-through. Wrap tape uphill, taping from a smaller diameter surface to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.

## 6.0 Shelf Life

Scotch 35™ Vinyl Electrical Color Coding Tape complies with the requirements of UL 510 for storage. It has a 5-year shelf life (from the date of manufacture) when stored under the following conditions. Store behind present stock in a clean dry place at a temperature of 70°F and 40-50% relative humidity. Good stock rotation is also recommended.

## 7.0 Availability

Scotch 35 Vinyl Electrical Color Coding Tape is available from your local 3M distributor in the following standard roll sizes:

- 3/4 in. x 66 ft.
- 1/2 in. x 20 ft.

Other lengths and widths are available by special request.

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### IMPORTANT NOTICE

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

**Warranty; Limited Remedy; Limited Liability.** This product will be free from defects in material and manufacture as of the date of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF**

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